Claims

1   1.   A microprocessor based system comprising:

2   a microprocessor; and

3   a memory comprising instructions, which, when executed by the microprocessor,

4   cause the microprocessor to store packet data in a physical address space of the memory;

5   to generate a logical index of the physical address space, the logical index has a logical

6   address space twice the size of the physical memory address space, the logical index to

7   logically map the physical memory addresses, such that each physical memory address

8   maps to two logical addresses; and to generate an access pointer to provide bi-directional

9   logical access to the logical address space.

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